

URBAN DISTRICT OF  
WINDERMERE

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ANNUAL REPORT

OF THE

Medical Officer of Health

FOR THE YEAR

1949

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LIVERPOOL

C. TINLING AND COMPANY LIMITED, PRINTERS, 53, VICTORIA STREET

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*To the Chairman and Members of the Urban District Council of Windermere.*

SIR, LADIES AND GENTLEMEN,

I have the honour to submit to you my Annual Report upon the health of the Urban District during the year 1949.

The gradual post-war resumption of progress in public health practice has been complicated by the initial difficulties of the first year's operation of the National Health Service Act, 1946, the Town and Country Planning Act, 1947, and the National Assistance Act, 1948.

This legislative upheaval has split Medicine into three poorly co-ordinated divisions—The hospitals, general practice, and the public health service. The emphasis now lies upon the curative services of the regionally controlled hospitals. The enormous cost of treatment will soon focus more attention upon the preventive services, for the adage that prevention is better than cure was never more appropriate than in this year of Grace.

I believe that these statutes offer great opportunities for advancement in the primary functions of hygiene and preventive medicine if the public health service of the local authorities can take its logical place in a more united trinity of medicine. It has a proud record in the past and still great faith in the future.

I wish to acknowledge the help and ready co-operation of my colleague the County Medical Officer of Health, and also the assistance afforded to me by the local general medical practitioners.

I am indebted also to the Chief Sanitary Inspector and his staff for the spirit of teamwork which exists in my department, and for the fund of local knowledge which they have laid at my disposal.

I have the honour to be,

Sir, Ladies and Gentlemen,

Your obedient servant,

FRANK T. MADGE,

Medical Officer of Health.



## NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

Area of the Urban District in acres	...	...	...	9,723
Population (mid 1949)	...	...	...	6,420
Inhabited Houses	...	...	...	2,066
Rateable Value	...	...	...	£75,433

The Urban District of Windermere lies in a long narrow strip down the east side of the Troutbeck Valley and for four miles along the east bank of Windermere Lake. The District slopes steeply from a level of about 800 feet in the east down to the Lake, which lies at about 130 feet above sea level. The slopes are well wooded and exquisite vistas of most of the Lake District are obtainable throughout.

The geology of the Urban District comprises in the southern half steeply dipping Kirkby Moor Flag in the Upper Ludlow Series of the Silurian System. In the northern half the rocks are Coniston Grits in the Wenlock Series of the Silurian System. At the extreme north, in the Troutbeck Valley, there are thin beds of Tarannon Shales, pale slates, Coniston Limestone, and then occur the Borrowdale Volcanic Series. There are occasional areas of glacial drift and some alluvial deposit in the valleys.

The climate is mild and equable. The valley bottoms are sheltered from the prevailing westerly winds, and the open aspect to the south-west provides full access to sunshine. Temperature gradient inversions are frequent at night but are soon dispelled in the mornings. The rainfall varies between 70 and 75 inches a year, but this figure is due more to the heaviness of the rain when it occurs rather than to an undue proportion of rainy days. Snow may be expected for one or two weeks in the late winter.

The District is mainly residential in character, with a seasonal influx of holiday visitors to enjoy the amenities of the National Park. This influx raises the population to a peak of approximately 10,000. The outlying portions of the District are mainly agricultural and many of the small local industries are ancillary to agriculture. There are also the following industries which provide a certain amount of local employment and stability to the area to balance the fluctuating conditions in the holiday trade:—

Boatbuilding	Machine Tool Manufactory.
Coffin Manufactory	Laundry
Cake Manufactory	Motor Engineers

The variety of these opportunities for local employment has, with emigration, kept Windermere happily free from unemployment. These industries together with the trade associated with the hotels and boarding houses have provided that economic security and local prosperity, which is a most important factor in the maintenance of the public health.

The Rateable Value of the Urban District is £75,433 and the product of a penny rate is £303. The Rate for 1949/50 is 18/7d., of which 14/7d. represents the County Rate.

#### STAFF.

Name.	Qualifications.	Office.	Whole or Part Time.	Other Offices.
F. T. Madge	M.D., Ch.B., M.R.C.S., L.R.C.P., D.P.H.	Medical Officer of Health	Part	M.O.H. Combined County Districts of Westmorland
F. C. Needham...	M.I.Mun.E., M.R.S.I., M.R.I.C.S., M.S.I.A.	Sanitary Inspector and Water Engineer from 1.3.49	Part	Engineer and Surveyor
G. K. Farrar ...	—	Clerk	Part	Clerk to Engineer and Surveyor
B. M. Machell ...	—	Clerk	Part	Clerk to M.O.H. Combined County Districts of Westmorland
J. N. Leckie ...	A.Inst.GasE.	Water Engineer to 28.2.49	Part	Gas Engineer

There have been only the above changes in the Water Dept. staff during the year. Clerical assistance is afforded by the part-time service to the Sanitary Department of a female clerk.

## VITAL STATISTICS.

The following extracts are made from information supplied by the Registrar-General with figures for 1948 for comparison:—

Area of the District ... .. 9,723 acres.

						1948	1949
Estimated civilian population (mid-year) ...						6,483	6,420
Live Births.	Legitimate—	males	...	...	...	45	46
		females	...	...	...	47	52
	Illegitimate—	males	...	...	...	1	—
		females	...	...	...	3	—
	Total		...	...	...	96	98
	Rate per 1,000 population		...	...	...	14·8	15·3
	Rate for England and Wales		...	...	...	17·9	16·7
Stillbirths.	Legitimate—	males	...	...	...	—	2
		females	...	...	...	1	1
	Illegitimate—	males	...	...	...	—	—
		females	...	...	...	—	—
	Total		...	...	...	1	3
	Rate per 1,000 total (live and still)		...	...	...	...	...
	births	...	...	...	...	10·3	29·7
	Rate per 1,000 population		...	...	...	0·15	0·46
Rate for England and Wales		...	...	...	0·42	0·39	
Deaths.	Males	...	...	...	...	35	50
	Females	...	...	...	...	40	54
	Total	...	...	...	...	75	104
	Rate per 1,000 population		...	...	...	11·6	16·2
	Rate for England and Wales		...	...	...	10·8	11·7
Infantile Deaths (under 1 year)							
Legitimate		...	...	...	...	2	2
Rate per 1,000 legitimate live births		...	...	...	...	21·7	20·3
Illegitimate		...	...	...	...	—	—
Rate per 1,000 illegitimate live births		...	...	...	...	—	—
Total Deaths under 1 year		...	...	...	...	2	2
Rate per 1,000 live births		...	...	...	...	20·8	20·3
Rate for England and Wales		...	...	...	...	34	32



	1948	1949
Neo-natal Deaths (under 1 month)		
Total neo-natal deaths ... ..	2	—
Rate per 1,000 live births ... ..	20·8	—
Deaths from Diarrhoea and Enteritis (under 2 years)		
Deaths ... ..	—	1
Rate per 1,000 live births ... ..	—	10·2
Rate for England and Wales ...	3·3	3·0
Maternal Mortality		
Deaths from Puerperal Sepsis ...	—	1
Rate per 1,000 total (live and still) births ... ..	—	9·9
Deaths from other Puerperal Causes	—	—
Rate per 1,000 total (live and still) births ... ..	—	—
Total deaths ... ..	—	1
Rate per 1,000 (live and still) births ...	—	9·9
Rate for England and Wales ...	1·02	0·98

Deaths from certain causes:—	1948	1949
Cancer ... ..	9	14
Measles ... ..	Nil	Nil
Whooping Cough ... ..	Nil	1
The main causes of death were:—		
Heart Disease ... ..	30	41
Intra-cranial vascular lesions ... ..	13	20
Cancer ... ..	9	14



## COMMENTARY ON THE VITAL STATISTICS.

The Registrar-General's estimate of your civilian mid-year resident population was 6,420 which is 63 less than last year. This decrease may be represented as an excess of deaths over births of 6 and an emigration from your District of at least 57 persons.

This estimated figure of 6,420 indicates that your population has become stabilised after the fluctuations of the war years, and that the level is about 600 above your pre-war average, but a proper perspective cannot be obtained by considering merely one year's changes. It is the general trend of population which is important for the planning of your future housing, water and sewerage requirements, and for the broader issues of the economic prosperity of your District.

When Windermere and Bowness were amalgamated in 1905, your population was 5,061, so your District has not shown any marked changes in the total population over the past 40 years, except for 1940 and 1941, when you absorbed an additional 1,500 war evacuees and factory workers, who returned home gradually between 1942 and 1945.

You have not maintained your population by your own reproduction. You have relied upon the yearly immigration of people from other areas to keep up your numbers. That is why you have a predominantly elderly population.

Never once in the ten years before the 1939-45 war did your births exceed your deaths in number, and your birth rate in that period was usually only about 70 per cent. of the average for England and Wales. In 1947, you reached the nearest you have ever achieved to the national average, and the highest rate you have attained in the last quarter of a century. I fear that this was merely a passing phase and that your natural decline will continue. The residential charm of the District will attract all the immigration you will need to maintain your numbers.

### **Birth Rate.**

I have already referred to the continued low birth rate. Apart from the local economic circumstances the effect of the two wars aggravated the position. The present child-bearing and begetting population suffered twice. There is a sad gap in their ranks due to the unborn casualties of the First World War, and at the onset of the Second War their marriages were delayed, prevented or frustrated at the time of their maximum fertility. If your native community is to survive you must raise your birth rate well above your death rate and to do that you will have to recapture and hold the faith of your young people in your local life.

**Still-birth Rate.**

Your still-birth rate was satisfactory.

**Death Rate.**

Your death rate was approximately the same as the average for England and Wales, a position which has been fairly constant during the past quarter of a century. The crude death rate is of course high on account of your elderly population.

**Infantile and Neo-natal Deaths.**

Infantile deaths are deaths in children under the age of one year, and included in this figure are the neo-natal deaths which are deaths in children under one month of age. This distinction helps to separate the deaths which are due to factors connected with pregnancy, childbirth and abnormal development which are more likely to cause death within the first month, from the factors connected with infant management which are more likely to cause death between one month and one year.

There were two infant deaths in 1949. The rate was 20.3 per thousand live births. Your figures are too scanty to carry statistical significance on their own merits, and since 1910 your infantile mortality rates have shown wide fluctuations from year to year. Your pre-war record over the five-year period was well below the national rate and reflected a very satisfactory improvement in child care by the local doctors, nurses, and above all by the young mothers in their homes.

The neo-natal deaths contain what we might call the hard core of "unavoidable" infant deaths. Many of these in the past have been due to prematurity, abnormality, or are the result of difficult childbirth. It does not appear likely that science will be able to prevent development of abnormalities but there are high hopes that blood tests and the increased availability of obstetrical specialists will help to reduce the number of neo-natal deaths.

**Maternal Mortality.**

There was one maternal death from puerperal sepsis, but the rate is statistically insignificant.

NOTIFIABLE DISEASES TABLE.

DISEASE.	Total.	Ages.											Admitted to Hospital.	Deaths.
		-1	1-	2-	3-	4-	5-	10-	15-	20-	35-	45-		
Measles ... ..	2	—	—	—	—	—	1	—	—	1	—	—	—	—
Whooping Cough ...	12	2	2	1	2	1	4	—	—	—	—	—	—	1
TOTAL ... ..	14	2	2	1	2	1	5	—	—	1	—	—	—	1



## PREVALENCE AND CONTROL OF INFECTIOUS AND OTHER DISEASES.

*Public Health Act, 1936, Sections 143-170.*

*National Health Service Act, 1946, Part III.*

The District had a very fortunate year. There were a few scattered cases of measles and whooping cough during the summer, but you escaped the nation wide outbreak of infantile paralysis.

No effective protection against measles has yet been discovered, but immunisation against whooping cough is now available and there seems every hope that this very distressing illness in little children can be virtually wiped out within the next decade.

Scarlet fever is possibly getting milder than it was in Queen Victoria's reign, sanitary improvements have limited its chance of spreading, and the new anti-biotic drugs have made its treatment so effective that it is now normally nursed at home. Scarlet fever is repressed rather than conquered.

Once more it is gratifying to report that there were no cases of diphtheria during the year. Since the weapon of immunisation became available the hard core has been smashed and I hope that serious outbreaks of diphtheria have been banished for all times. I wish to thank the local doctors and nurses for their efforts to secure the immunisation of every baby before the first birthday and the school medical officers for their part.

The year was free from threatened smallpox, but I do not think that people realise that we are now only 24 to 48 hours by air from areas of ravage by this disease. Smallpox swept the country from time to time until some 50 years ago when widespread vaccination checked its progress and vigilance at the seaports prevented its importation. A generation has grown up which is blinded by the complacency of false security, not yet realising that air travel has made smallpox once more a very real risk to the community.

Persons from abroad who may be incubating the disease arrive in this country well within the incubation period. It is most important that all children should be vaccinated in infancy. The present low vaccination state of the population is inviting trouble from this disfiguring and often fatal disease. I cannot stress too strongly the wisdom of taking obvious precautions against preventable diseases.



### Hospital and Ambulance Arrangements for Infectious Diseases.

*National Health Service Act, 1946, Parts II and III.*

Hospital accommodation for infectious diseases is provided by the Regional Hospital Board, Manchester, at Lancaster Isolation Hospital, a modern and well equipped building, within easy reach of this area under modern transport conditions.

Ambulance transport for cases of infectious disease is provided by the Westmorland County Council and is based at Kendal.

### Disinfection Arrangements.

Disinfection facilities for clothing and bedding are not very satisfactory owing to the lack of a steam disinfecter. It is, however, possible to obtain this service from neighbouring authorities.

Disinfection of premises and other chattels is carried out by experienced staff locally and presents no special problems.

**TUBERCULOSIS TABLE.**

Age Periods.	NEW CASES.				DEATHS.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
0	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	—
5	—	—	—	—	—	—	—	—
15	—	—	—	—	—	—	—	—
25	—	—	—	—	1	—	—	—
35	1	—	—	—	—	—	—	—
45	—	—	—	—	—	—	—	—
55	1	—	—	—	—	—	—	—
65	—	—	—	—	—	—	—	—
TOTAL ...	2	—	—	—	1	—	—	—

## HOUSING.

*The Housing Acts, 1936 and 1949.*

Under the Housing Acts your Council has a duty to consider the general housing conditions in your district, to ascertain whether any are unfit for human habitation, and to assess the need for further houses. You have powers to deal with unfit houses, powers to provide new houses for all classes, and various powers and duties in the management of your Council's housing estates. Good housing conditions are an integral part of public health.

### **Present Housing Position.**

*Housing Act, 1936, Section 57.*

The number of inhabited houses in your District is 2,066. With an estimated population of 6,420 the average number of persons per house is 3.2. This is not a high figure for a desirably sized family, but many of the houses have only one or two occupants.

There appears to be little overcrowding within the strict definition of the Housing Act which assumes that living-rooms are used also for sleeping purposes, and that the sexes can be segregated irrespective of age, health or family relationships. Assessment of overcrowding based on a minimum bedroom standard is long overdue and would provide a more realistic picture of the manifold domestic difficulties which are reflected in the long application lists for your new houses.

It is probable that overcrowding is temporarily increased during the peak of the holiday season, but no certificates under Section 61 of the Housing Act, 1936, have been granted by your Council to authorise exceeding the permitted numbers.

### **General State of Houses.**

The general state of the property in your District is good. A few of the older houses are in poor condition. These old houses suffer from rising dampness due to the absence of damp proof courses which cannot be remedied without excessive work in underpinning. The sound methods of the original construction have ensured that deterioration of the structure is a very slow process, but heavy repair costs and low rentals have made housing repairs unprofitable to the landlords. These substandard dwellings will in due course be dealt with under the Housing Act, but they are overwhelmingly out-numbered by the well maintained and sound property in your District, over a thousand of which have been built since 1901.

The Calgarth Housing Estate merits special comment. It consists of brick-built single-storey blocks constructed in 1940 as temporary dwellings and hostels for war-time workers at the adjoining factory. An undertaking was given that these buildings would be removed within 10 years. On the closure of the factory and the dispersal of the workers your Council requisitioned the buildings from the Ministry of Works and converted many of the blocks into temporary dwellings.

It is my opinion that these conversions provided a quick and much-needed supply of temporary houses, below the standard of the Government sponsored prefabricated bungalows, but quite well equipped with modern amenities for meeting a short term need. They are not without defects, and complaints of dampness are received from time to time. I have inspected many of them in winter-time and I have had war-time experiences of living in this type of unlined brick barrack hut so I know these defects. They are not a bad makeshift until proper accommodation can be provided in traditional houses.

I must stress however the essentially temporary nature of these houses, and as they are intrinsically substandard dwellings I feel that their continued occupation should be a stimulus to the planning and starting of traditional houses to replace them. The temptation to regard them as an easy solution of the local housing shortage for an indefinite time must be resisted as a retrograde step in accepting a standard of accommodation which is well below the spirit of the times.

### **Housing Act Action.**

A modest start was made in slum clearance during the year, and preliminary inspections were made for future actions. The problem is not a very difficult one in Windermere and I think good progress can be made in pruning out and tidying up the decayed properties.

### **Closing Orders.**

*Housing Act, 1936, Section 12.*

Six closing orders were made during 1949. Four houses in one block at Holly Hill, Bowness, were dealt with in this way pending their internal reconstruction or conversion to trade use. Two houses at Woodside, Bowness, were similarly treated pending their internal conversion.

These six were the only closing orders in the register of local land charges at the year end.



**Undertakings.**

*Housing Act, 1936, Section 11.*

Three undertakings not to use premises for human habitation were accepted by your Council during the year. These were three houses in Ash Street, Bowness, which were considered very suitable for conversion to trade warehouses, and two of these were already subject to an informal undertaking.

Five undertakings were in the register of local land charges at the year end.

No undertakings to perform repair works under this section were accepted during 1949.

No applications for improvement grants under the Housing Act, 1949, were received.

**Demolition Orders.**

*Housing Act, 1936, Section 11.*

One demolition order was made during the year against an inhabited shack at Alice Howe Farm, Windermere. This was effected satisfactorily.

Action was pending at the year end for the making of demolition orders on three houses in Rayrigg Road, Bowness.

One demolition order on a cottage in Rayrigg Road remains outstanding since 1934 and is still occupied by the original tenant.

**Clearance Areas.**

*Housing Act, 1936, Section 25.*

There are no declared clearance areas.

**Condemned Houses Occupied by Licence or Regulation.**

No condemned houses have been occupied by bombed-out persons by your licence under Defence Regulation 68A, nor by persons inadequately housed by your requisition under Defence Regulation 51.

**Fit Houses Requisitioned.**

No houses are occupied under your Council's requisitioning powers.

**Estimated Requirement for New Houses.**

*Housing Act, 1936, Section 71 (amended by Housing Act, 1949).*

In conjunction with your Building Surveyor I estimate that between 350 and 400 houses are required to meet the needs of those now without



a separate home, those in substandard houses, and those to be rehoused from the Calgarth hutments.

### **Local Authority Housing Schemes.**

Your Council plans to complete the Oldfield Estate as soon as possible. This scheme consists of 32 houses, of which eight are now occupied, six are under construction, and approval has been obtained from the Ministry of Health for the construction of the remaining twenty houses.

Approval has also been obtained for the erection of four flats in Upper Oak Street, Windermere.

Your Council is looking ahead to meet the extensive commitment of replacing the Calgarth huts, and is preparing a scheme for the building of some 300 new houses in a more central position in Windermere.

Site works are difficult on account of rock and the scarcity of level ground. The District is far removed from building resources which are likely to be able to deal expeditiously with a programme of the size which your need dictates. The situation of your District in the National Park calls for a standard of layout and external treatment which is so costly that it becomes somewhat incompatible with the mass standards of state-aided housing.

These difficulties need not engender such dismay that we should rest content. Even if we are not in a position to start building at present, subsequent delay could be minimised by the clearance of sites, acquisition of the land, and preliminary site works.

If this problem is not tackled resolutely your newly-married couples must face an indefinite sojourn in one of the parental homes, and about a thousand of your men and women will be condemned to spend the best part of their lives in those poor huts on Calgarth, unless they are to be driven out of the district by despair.

### **Housing Building Progress.**

Eight new permanent houses on the Oldfield Estate were completed during 1949 by your Council and six new houses were completed by private enterprise.

At the year end the houses under construction numbered four by your Council and two by private enterprise.

By private enterprise four dwellings were provided by the conversion of existing buildings.

### **Tenants Selection.**

The present method of selecting tenants for your Council houses is for your Housing Sub-Committee to consider all the applications and then select the tenants whom they consider are most in need of being re-housed. No points system is in operation and there is no anonymity.

The application lists were checked at the year end and there were about 312 families still desiring permanent houses. About 190 of these are without a house of their own at present.

### **Housing Management.**

Your Council now own 88 permanent dwellings. Routine repairs and maintenance are carried out partly by direct labour and partly by local contractors. Rents vary from 6/- to 16/- per week, exclusive of rates, and the rateable value of the Council houses are between £9 and £27.

### **Verminous Houses.**

*Public Health Act, 1936, Sections 83-85.*

No action was necessary during the year.

### **Nuisances and Notices in Dwellings.**

During the year the following action was taken:—

Informal Notices Served ...	...	...	...	...	...	10
Statutory Notices Served ...	...	...	...	...	...	0

In no case was it necessary to obtain an abatement order from the Court. There was a general desire on the part of owners to remedy defects in spite of the current difficulties of controls and the shortage of labour and materials.

### **Dangerous Buildings.**

*Public Health Act, 1936, Section 58.*

No formal action was taken during the year, but consideration was pending on two ruinous and dilapidated houses which were subject to undertakings not to be used for human habitation. These undertakings did not embrace structural maintenance and slowly decayed to be eyesores.

### **Parks and Open Spaces.**

Your Council has extensive parks and open spaces, both around the Lake and on the surrounding heights. These form a very valuable amenity for the elderly and those who for various reasons enjoy leisurely contemplation of the mountains.

### **Bathing Facilities.**

A portion of Windermere Lake is marked off by stakes at Miller-ground, but the pool now requires considerable renovation of the fittings, and the provision of dressing rooms and toilet accommodation.

The bathing is safe from physical dangers and from any serious contamination as lake water flows naturally through the pool at all times.

### **Tents, Vans and Sheds, and Moveable Dwellings.**

*Public Health Act, 1936, Sections 268-269.*

Two licensed camping sites were on the Register at the end of the year. No action was taken during the year. Your Council imposes conditions upon the grant of licences and requires their annual renewal. As this District is within the nucleus of the future National Park it is most desirable that strict but unobtrusive supervision should be exercised over camping sites to ensure that the natural beauty of the country is not despoiled by the careless few.

Unlicensed camping sites are scattered throughout the District but very little nuisance arises from casual campers. The improvised sanitary arrangements and refuse disposal cause little trouble, but campers take water from polluted becks at their own risk.

The rather free interpretation of the word caravan on some sites to include omnibus bodies and similar erections leads to abuses and I consider that camping sites should be limited to tents and genuinely mobile caravans.

One individual camping licence was in force at the year end.

### **WATER SUPPLIES.**

*Water Act, 1945.*

My Annual Report for 1947 provided a very detailed account of the historical, geographical, geological and technical features of your two sources of public water supply at Dubbs and Ghyll Head. This year's report will be limited to progress records.

The public water supply is potentially adequate in quantity and fairly satisfactory in quality. The results of laboratory examinations of the water samples taken during the year are set out in Appendix "A." A scheme for frequent and regular sampling of both raw and treated waters has been instituted.



The severe drought of 1949 placed a great strain upon the water supply. Ghyll Head reservoir was almost exhausted, and Dubb's reservoir was lowered to 6,000,000 gallons out of the normal 25,000,000 gallons.

South Westmorland Rural District Council generously lent a supply of 4-inch pipes, and an old pumping engine was moved from Alan Knott Quarry to Borrans reservoir, so that water from the latter could be pumped across country into the Windermere main in Dubbs Road. Just as the surface line had been completed and tested the rains broke and the emergency scheme was dismantled.

Such water shortage at the height of the tourist season would be very embarrassing to Windermere. The exceptionally dry summer may not be repeated for years and the lessons of 1949 may easily be forgotten. The annual rainfall is more than adequate, and the problem resolves itself into either increasing storage at the elevation which can be secured at Dubbs and Borrans, or by remedying the enormous waste of water in the distribution system.

The wastage probably occurs in the mains and service pipes as the records of the flow at night show a fairly level loss of about ten thousand gallons per hour. This recorded leakage has existed for over a quarter of a century, and a comprehensive division of the area with valves and a programme of waste detection during the night would probably avoid or postpone capital expenditure on increased headworks. Alternatively it would be of considerable advantage if ways could be found to utilise Borrans compensation water reservoir as an ancillary supply.

### **Dubbs Supply.**

The sanitary arrangements at the annual sheepdog trials held on your gathering ground were under my personal supervision during 1949. I consider that the risks of pollution of your reservoir were minimised.

Improvements to the fencing of the reservoir were made during the year and sheep were excluded. Some manurial pollution by animals on the catchment area is inevitable, and tilling of part of the gathering ground is anticipated.

I am now of the opinion that filtration and chlorination are most desirable for both the maintenance and purity and for minimising incrustation in your distribution mains.

### **Ghyll Head Supply.**

The condition of this supply has deteriorated. It was discovered



during 1948 that the gathering grounds of your reservoir was being used for camping and field craft training by the Organisation which owns most of the land. The construction of shallow latrines and sullage pits constitutes a very serious risk of human excretal pollution of the public water supply. Your Council are pursuing all possible steps to overcome these risks, and I recommend that control of the land should be secured.

The Organisation have been most helpful during 1949 and have avoided the catchment areas as far as possible.

I have recommended that the supply shall be chlorinated at all times until the question of the use of the gathering ground has been settled to my satisfaction.

The condition of Candlestick Moss catchment area is very poor and its yield is now negligible. The runners need retrenching and the water is stained with peat. The upper end of the reservoir is very shallow and shows a heavy growth of weed. On the whole Ghyll Head is not a very desirable source of supply, although by filtration, alkalisation, and chlorination it can be made usable. I would prefer to see its abandonment if a less troublesome and risky source could be found.

In conclusion I have to advise your Council that the other recommendations contained in Memorandum 221 of the Ministry of Health should be constantly observed. Your Council has a double responsibility of supplying pure water as undertakers, and of safeguarding the health of your population as a Sanitary Authority.

The Water Engineer informs me that the number of houses connected to the public supply is about 1941 which leaves 125 reliant upon private supplies. There are stated to be no houses supplied from standpipes. No extension schemes are contemplated at present.

I have no official knowledge of the quantity of the private water supplies but I suspect that the quality of the average supply fluctuates widely and I can do no more than warn the users that they drink it at their own risk, that they should have it tested for purity at regular intervals and that if in doubt they should boil it.

### **SEWERAGE.**

*Public Health Act, 1938, Sections 14-15.*

The greater part of your District is provided with public sewerage which was installed or relaid during the last 35 years. Before that time

the old sewers were in separate systems for the three disposal plants at Braithwaite Fold, Beemire and Troutbeck Bridge. In 1911 your Council commenced the present disposal works at Tower Wood, relaid some 8 miles of public sewer, and converted many of the old sewers into surface water drains, completing the main works in 1926.

Sewage has to be pumped to Tower Wood at two points in the system. The first pump is situated at Calgarth and the second at Bowness Bay. There are storm water overflows in connection with each of these plants for the excess to pass directly into the Lake. Considerable difficulty has been experienced during the year in securing replacement of worn out parts of the Bowness Pumps. The dry weather flow of sewage received at Tower Wood was estimated in 1949 to be 600,000 gallons per day, which is a high figure for the population served by the sewerage system, and suggests considerable infiltration water. As prolonged dry weather is not common in your District the normal working level of the flow under average climatic conditions is between 1,000,000 and 1,500,000 gallons per day, which is rather a dilute sewage. Gas works bye-products cause considerable trouble and were noted in the report of my predecessor as far back as 1926.

The general provision of plant is satisfactory for producing a good effluent. The load on the works could be reduced considerably if infiltration water could be diverted. The present storm water tanks are inadequate and increased capacity should be provided.

The majority of the houses which are not in the sewage area use cesspools and septic tanks. A few pail closets still exist in some of the older property, and a few privies and privy middens are in use in the outlying parts of the District. There were no conversions to water closets during the year, and your Council has not made any grants for this purpose under Section 47 of the Public Health Act, 1936.

### **Public Conveniences.**

*Public Health Act, 1936, Section 87.*

Public conveniences are sited at Bowness Bay, Pinfold, New Road, Broad Street and Queen's Park. There is need for an additional convenience for both sexes at the Glebe Road Car Park to cater for the weekend motor coach traffic.



## PUBLIC CLEANSING.

### **Refuse Collection.**

*Public Health Act, 1936. Section 72.*

Domestic refuse is collected from the whole of your District with the exception of a few detached and isolated dwellings. Your Council's own vehicles and staff is used for this work. Recent supply shortages have caused considerable difficulties in maintaining vehicles in a serviceable condition.

### **Refuse Disposal.**

*Public Health Act, 1936. Section 76.*

Refuse is tipped at Braithwaite Fold, Bowness. Controlled tipping is aimed at, but the local scarcity of covering material entails undesirably extensive tip faces. This tip is getting full and when a new site is chosen I recommend that it should be situated further away from the populous areas. Two sites were selected at the year end and were under consideration by your Council.

The whole matter of refuse disposal has always been difficult in your District. The natural beauty of the country must not be desecrated by dumps of ugly human refuse, yet the refuse must be put somewhere and the land does not yield enough covering material to hide and minimise the consequent nuisances of unsightliness, smell, rats and fire.

In the days of horse drawn refuse carts and local contractors it was obviously imperative to use multiple local tips, but now motor transport has changed the situation. You have in the past tipped at Calgarth, Queen's Park, Bowness shore, Rayrigg Estate, the New Road Lavatory site, and sundry other small sites, and some very useful land improvements have resulted. There seems now no excuse for continuing to live almost on top of one's own midden.

I consider that you should aim at securing a new site which will last you for many years and which is so far removed from dwellings or beauty spots that the shortage of covering material will not matter so much.

### **Salvage of Waste Materials.**

*Salvage Recovery Order, 1940.*

Salvage was carried out in the national interest at a loss to your Council. It is quite obvious that with such a small population the sorting and collection of waste materials is most uneconomical. During 1949 this obligation was removed and your Council abandoned such salvage.

**Street Cleansing.***Public Health Act, 1936. Section 77.*

This work is undertaken by the Highways Department and the streets are well maintained.

**FOOD AND DRUGS.**

Under the Food and Drugs Act, 1938, and the Orders and Regulations made thereunder, your Council has the duty of carrying out specific responsibilities in the registration of certain food premises, in the supervision of milk distributors and certain dairies, and in the wide field of protection of the public from food-borne diseases. The County Council are responsible for detecting the adulteration of foodstuffs, and the supervision of the sale of drugs.

The Act came into force just before the commencement of the late war and apart from the Milk and Dairies Orders and Regulations which were continued from earlier Acts, the full operation has not yet been fully achieved. The Ministries of Health and Food are sponsoring a vigorous campaign against food-borne diseases and the proper implementation of the Act should give a greater measure of protection to the public. The co-operation of the catering trade, and the education of all food handlers in a high standard of hygiene will be sought under the wider powers provided by the Act.

At the instigation of the Ministry of Food your Council is preparing byelaws to govern the handling and wrapping of food and the sale of foodstuffs in the open air, and it is expected that these will become operative in 1950.

**Precautions against Contamination.***Food and Drugs Act, 1938, Section 13.*

Food traders and caterers observe a fairly good standard of cleanliness on the average, but considerable work lies ahead in raising the standard of those who are now below that average. I want to see cleaner food, cleaner premises and cleaner food-handlers.

This aim is of major importance. It will involve my department carrying out your statutory responsibilities with particular diligence, and it will require the education and co-operation of all food-handlers within your Area.

I am confident that this co-operation will be forthcoming. I believe



that traders are eager to set their premises in order in the interests of enterprise and competition, and that they are anxious to eliminate slipshod methods among their staffs.

Thorough cleanliness in the kitchen is far more important than tidiness in the dining-room. No food trader nor caterer should be ashamed to show his customers behind the scenes, and every customer should be confident that the food he eats is clean and has been cleanly prepared. He has a right to be so protected and your Council is the guardian of that right.

Food-borne disease, mild dysenteries, and attacks of diarrhoea and vomiting are not infrequent in our homes, and among our visitors. I am confident that higher standards will reduce these preventable diseases.

### **Ice-cream Trade.**

*Food and Drugs Act, 1938, Section 14.*

*Ice-Cream (Heat Treatment, etc.) Regulations, 1947.*

The following premises were registered under Section 14 of the Food and Drugs Act, 1938:—

Manufacture by hot mix, cold mix, storage and sale	...	...	3
Manufacture by cold mix, storage and sale	...	...	2
Storage and sale only	...	...	15

A comprehensive code of standards for the ice-cream factories, plant and retail units was approved by your Council and circulated to the traders. The open barrow or cart has been abolished, and the enforcement of the Ice-cream (Heat Treatment, etc.) Regulations, 1947, has greatly improved the technique of manufacture.

### **Prepared Meats.**

*Food and Drugs Act, 1938, Section 14.*

The number of premises on the Register under Section 14 of the Food and Drugs Act, 1938, used for the preparation of sausages, potted meat, preserved meat, pressed meat, and pickled foods was ten at the year end. No particular difficulties have been encountered in these trades.

### **Milk.**

On 1st October, 1949, a major reorganisation of powers and duties took place in the supervision of milk between the Ministry of Agricul-

ture and Fisheries, the County Councils and the County District Councils.

The Food and Drugs (Milk and Dairies) Act, 1944, had remained in abeyance since its enactment, and after the transfer of certain responsibilities from the Ministry of Health to the Ministries of Food and Agriculture and Fisheries, the Act came into operation this year.

The Milk and Dairies Regulations, 1926-1943 and the Milk (Special Designations) Regulations, 1936-1948 were replaced by a new set of Regulations made jointly by the three Ministries of Health, Food and Agriculture and Fisheries, which considerably strengthened the powers of supervision. The new Regulations which now mainly govern milk are:—

The Milk and Dairies Regulations, 1949.

The Milk (Special Designations) (Raw Milk) Regulations, 1949.

The Milk (Special Designations) (Pasteurised and Sterilised Milk) Regulations, 1949.

The effect of these Regulations and the associated Statutes includes the following changes which effect the powers and duties of local authorities:—

Your Council transferred to the Ministry of Agriculture and Fisheries the duties of registering and supervising dairies and cow-sheds.

Your Council acquired the duty of registering and supervising milk distributors, and dairies which are not dairy farms.

Your Council transferred to the County Council the licensing powers for pasteurisers' and sterilisers' licences.

Your Council retained licensing powers and supervisory duties for all other special designation milk dealers' and supplementary licences, but your right to charge fees for these has been abolished.

The County Council transferred to the Ministry of Agriculture and Fisheries the licensing powers and supervisory duties for the production of designated milk.

The Regulations include many provisions which considerably assist maintenance of the public health, and give legislative force to many of the principles of common cleanliness.

There are detailed requirements for cleanliness in dairies, in milk vessels, in retail vehicles, and in the milk handlers.

The powers of the Medical Officer of Health are greatly strengthened in dealing with suspected and proved carriers of disease, and with infected milk.

Accredited milk will not be recognised after 1954, and its fate is welcomed.

No new tuberculin tested milk licences will be granted after 1954 unless the herd is attested. This is a forward step.

No tuberculin tested milk licences will be granted after 1957 unless the herd is attested. This will be the completion of the previous step.

The Milk (Special Designations) Act, 1949, was enacted during the year and provides for the logical extension of the above Regulations to make compulsory the retail sale of only special designation milk in specified areas. This programme will be linked with the progress of the Attested Herds Scheme to complete eradication areas.

I think that day is not far distant when our District will be declared free from bovine tuberculosis and the only milk allowed to be sold will be tuberculin tested milk from attested herds or heat treated milk. Very rapid progress is being made towards that goal, and we should not be distracted by side issues.

*1st January—30th September, 1949.*

#### **Registration of Dairies and Dairymen.**

*Milk and Dairies Regulations, 1926-1943.*

Total number of registered Dairies ...	...	...	...	18
Total number of registered Dairymen ...	...	...	...	21
Producer-retailers within the District ...	...	...	...	13
Producer-retailers outside the District ...	...	...	...	8
Retailers from premises within the District ...	...	...	...	4
Retailers from premises outside the District ...	...	...	...	0

Six visits of inspections were made to milk premises.

*1st October—31st December, 1949.*

#### **Registration of Milk Distributors and Dairies which are not Dairy Farms.**

*Milk and Dairies Regulations, 1949.*

Total number of registered distributors ...	...	...	...	5
Total number of registered dairies ...	...	...	...	5

The retail distribution of milk is both by bottled milk and the old-fashioned loose methods. Traders are becoming keener to meet the desire of the enlightened customers for bottling. Rationalisation of milk



rounds is still in force and is not in the best interests of the consumers. Tuberculin Tested (certified) milk is available some of which is retailed in a type of wax carton which is especially commended. No pasteurised milk is available.

### **Cleanliness of Milk.**

*Food and Drugs Act, 1938, Section 69.*

13 milk samples were taken during the year and the reports were:—

Ungraded Milks.	B. Coli	Satisfactory 6.
		Unsatisfactory 1.
	Methylene	Satisfactory 6.
	Blue	Unsatisfactory 1.
Accredited Milks.	B. Coli	Unsatisfactory 2.
	Methylene	Unsatisfactory 2.
	Blue	
T.T. Milk.	B. Coli	Satisfactory 2.
	Methylene Blue	Satisfactory 2.

### **Pathogenic Organisms in Milk.**

*Food and Drugs Act, 1938, Section 68.*

Six samples were examined biologically in guinea pigs for the presence of tuberculosis organisms and all were negative. The finding of tubercle bacilli in milk is difficult and one must bear in mind the human biological tests on your own children with their tragic record of 26 new cases and three deaths in the past 10 years from non-respiratory tuberculosis. The growing popularity of the Attested Herds Scheme and Tuberculin Tested Milk production, together with the pasteurisation of Accredited and ungraded milks will gradually reduce this toll of human suffering. Quarterly testing will be carried out in 1950.

No instances of other disease-producing organisms in milk were found. We know that *Brucella Abortus*, the organism which causes contagious abortion in cattle and undulant fever in man, can be isolated from a good proportion of bulked milk supplies, and it is probable that mild infections constantly occur. No serious cases have been encountered and the veterinary profession is taking steps to inoculate cattle against the disease.

It was not necessary to stop any milk supply or restrict the activities of any milk-handlers under the Milk and Dairies Regulations on account of infectious disease.

### **Designated Milks.**

#### *Milk (Special Designations) Regulations.*

The County Council was responsible up to 30th September, 1949, for the granting of annual licences authorising the use of the special designations "Tuberculin Tested" and "Accredited" in respect of establishments at which the milk is produced and bottled or only produced. The following establishments in the District were so licensed:—

Tuberculin Tested	...	...	...	6
Accredited	...	...	...	2

Your District Council is responsible for the granting of dealers' and supplementary annual licences for the sale of Tuberculin Tested and Accredited Milks. No licences were in force during the year.

### **Adulteration of Milk and Other Foods.**

#### *Food and Drugs Act 1938, Sections 1-7.*

This matter is the responsibility of the County Council and I anticipate that the County Medical Officer of Health will include in his Annual Report some information on this aspect.

### **Licensed Slaughter-houses and Knackers' Yards.**

#### *Food and Drugs Act 1938, Sections 57-61.*

There are three licensed slaughterhouses, but these are not now in use on account of the centralisation of all slaughtering under the Ministry of Food's arrangements. There are no knackers' yards in your District.

### **Condemnation of Meat.**

#### *Food and Drugs Act 1938, Sections 10 and 12.*

All slaughtering is carried out at the Kendal Abattoir, where the meat is inspected by the Borough Inspectors. 110 lbs. of frozen beef was condemned in your District. Considerable improvement is needed in some of the vehicles used for meat distribution.

### **Condemnation of Other Foods.**

The following foodstuffs were condemned by your Inspector during the year:—

Milk	...	...	...	...	...	697	tins
Fish	...	...	...	...	...	7	„
Meat	...	...	...	...	...	4	„

Vegetables	...	...	...	...	19	tins
Soup	...	...	...	...	1	tin
Fruit	...	...	...	...	36	tins
Jam	...	...	...	...	2	„
Fish	...	...	...	...	13	stones
Cheese	...	...	...	...	19½	lbs.
Cream	...	...	...	...	2	gallons
Potatoes	...	...	...	...	½	ton
Grapes	...	...	...	...	232	lbs.
Sweets	...	...	...	...	342	„
Oranges	...	...	...	...	15	cases
Bananas	...	...	...	...	5	bunches
Ducklings	...	...	...	...	8	
Cooked Offal	...	...	...	...	4	lbs.

### General Sanitary Inspection.

Your Council employs one part-time Sanitary Inspector and his salary is apportioned between his sanitary inspection duties and his other duties in a proportion approved by the Minister of Health. You receive through the County Council a grant of one-half of that apportionment of his salary allocated to sanitary inspection, and this should therefore be the basis upon which his time is devoted to the various duties.

Although the relaxation of civil building control afforded some relief a very much greater added burden was imposed by your Council accepting delegated powers under the Town and Country Planning Act 1947. This involves a volume of detailed clerical work of an imperative nature which is hardly commensurate with the few powers conferred on your Council. The bulk of this work falls upon the same man.

1949 added the managership of the water undertaking. I consider that it is time that this position was reviewed as I am not satisfied with the continued encroachments made upon the time of the sanitary inspector.

It is difficult to arrange duties in combined appointments in a small local authority, particularly when an Inspector is single-handed, and there has to be considerable elasticity to cover all the responsibilities. I am keeping this matter under close review as I am of the opinion that sanitary inspection work is being prejudiced by these other duties.

Your Inspector carries out his duties in a most able manner, and during the year he made 615 inspections on all types of work, but there



is a limit to what one man can do in a day, and we are both anxious to maintain the efficiency of our Department in carrying out your Council's responsibilities.

#### **Offensive Trades.**

*Public Health Act 1936, Section 107.*

There are no offensive trades in the District.

#### **Factories.**

*Factories Act 1937.*

There are 64 factories on the Register. 50 inspections were made. No written notices were issued and no prosecutions were required. No references were made to H.M. Inspector and none were received from him.

No lists of outworkers were supplied to your Council by factory owners, and I have no official knowledge of any cases of default in this respect.

There are no basement bakehouses in the District. No detailed survey has yet been taken of the means of escape from factories in case of fire.

Form 572 (Revised) was sent directly to the Minister of Labour and National Service giving the details of your District's administration of the relevant sections of Parts I and VIII of the Factories Act 1937, in accordance with Section 127 of that Act.

#### **Factory Inspections.**

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
Factories in which Sections 1, 2, 3, 4, and 6 are to be enforced by Local Authorities ... ..	15	7	—	—
Factories not included in (1), in which Section 7 is enforced by Local Authorities ... ..	49	43	—	—
Other premises in which Section 7 is enforced by the Local Authority (excluding outworkers' premises) ... ..	—	—	—	—
TOTAL ... ..	64	50	—	—

### **Shops Acts, 1912-1936.**

Occasional visits were made under the Shops Acts for the supervision of sanitary accommodation, washing facilities, and the maintenance of suitable temperature. These duties are not adequately covered at present due to the prior claims of other work, but it is hoped to increase the supervision next year. Informal notices were served whenever any contraventions were observed.

### **Common Lodging Houses.**

*Public Health Act, 1936, Part IX.*

There are no registered common lodging houses in the area.

### **Rent Restriction Acts.**

No action was taken during the year under the Rent and Mortgage Interest Restriction Acts, and no contraventions of Section 4 of the Housing Act 1936, regarding rent-book entries, were encountered.

### **Smoke Abatement.**

*Public Health Act 1936, Sections 101-106.*

No Notices were served during the year to abate smoke nuisances.

### **Laboratory Services.**

*Public Health Act 1936, Section 196.*

Satisfactory laboratory facilities were available both at Kendal and Carlisle for all public health purposes. During 1947 a new scheme was inaugurated by the Public Health Laboratory Service for the performance of all laboratory examinations of a preventive and epidemiological nature free of charge to the Local Authority and the patient. This should do much to encourage the freer use of modern diagnostic methods by general practitioners and your health department.

### **National Assistance Act, 1948, Section 47.**

It was not necessary during the year to deal with any cases requiring removal.

### **Bye-Laws.**

Bye-laws on public health matters are in force for:—

Building.	Dairies and Cowsheds.
Burial Grounds.	Nuisances.
Common Lodging Houses.	Slaughterhouses.

**New Legislation.**

Food and Drugs (Milk and Dairies) Act 1944 became operative on 1st October, 1949.

Milk and Dairies Regulations 1949 became operative 1st October, 1949.

Milk (Special Designations) (Raw Milk) Regulations 1949 became operative 1st October, 1949.

Milk (Special Designations) (Pasteurised and Sterilised Milks) Regulations 1949 became operative 1st October, 1949.

**APPENDIX "A."****LABORATORY EXAMINATION OF PUBLIC WATER SUPPLIES.**

Nature of Test	Standards Max.	Dubbs Raw	Ghyll Head Raw	Ghyll Head Treated
<i>Pr. coli</i> count 37° ... ..	3-10	+ in 10 ml.	+ in 10 ml.	+ in 30 ml.
<i>Faecal coli/strep</i> ... ..	0	0	—	0
Character ... ..	—	Clear	Not clear	Clear
Reaction ... ..	—	7·2	6·6	8·0
F. & S. Ammonia ... ..	·005	·011	·004	·005
Albuminoid Ammonia ... ..	·008	·015	·009	·015
Total Solids ... ..	—	5·4	4·0	6·8
Hardness { Perm. ... ..	—	2·0	1·8	2·2
	Temp. ... ..	0·0	0·0	·1
	Total ... ..	2·0	1·8	2·3
Chlorides ... ..	3	1·0	1·3	1·15
Nitrates ... ..	·1	—	·014	—
Nitrites ... ..	0	—	0	—
O·2 Absorbed ... ..	·1	·09	·194	·054
Plumbosolvency ... ..	0	—	—	(Iron) ·06
Rainfall, 24 hours ... ..	—	Nil	Moderate	Nil
Date Sampled ... ..	—	29/3/49	9/8/48	29/3/49
Laboratory ... ..	—	Carlisle	Carlisle	Carlisle

REMARKS.—Chemical analysis results expressed in parts per 100,000.







